

### **REMARKS**

Applicants appreciate the Examiner's thorough review of the present application, and respectfully request reconsideration in light of the preceding amendments and the following remarks.

Claims 1, 3-10, 12-37 are pending in the application. Claims 2-3 and 11 have been cancelled. Claims 1, 4-10 and 12 have been amended. In particular, claims 8 and 10 have been rewritten in independent form including all limitations of base claim 1. Claims 13-37 have been added to provide Applicants with the scope of protection to which they are believed entitled. The new claims find solid support in the original specification, e.g., page 1, lines 15-20, page 7, lines 6-16, and 27-31, the paragraph bridging pages 9-10, page 10, lines 23-29, 33, 37, and the original drawings, e.g., Fig. 6. No new matter has been introduced through the foregoing amendments.

*shows 3 layers!*  
The rejections under 35 U.S.C. 112, second paragraph, and 35 U.S.C. 102(b) as manifested in pages 2-4 of the Office Action are believed overcome in view of the above amendments. More particularly, Applicants respectfully submit that amended independent claim 1 is not anticipated by the applied references, especially, *Barnholtz* (U.S. Patent No. 5,830,558) and *Rudy* (U.S. Patent No. 4,287,250).

Amended claim 1 now requires that the sheet **consist of a single material layer**. As can be seen in Figs. 1-2 of *Barnholtz* and Figs. 2-5 of *Rudy*, the references' sheets must have at least two layers. The references cannot properly be modified to have a single layer as presently claimed because doing so would render the references unsatisfactory for their intended purposes. *See* the title, Abstract, and column 2, lines 38-39 of *Barnholtz*, and column 2, line 18, and the paragraph bridging columns 3-4 of *Rudy*. This unique feature of the present invention is not found in nor suggested by other teaching references. Thus, the applied art of record singly or in combination fails to disclose, teach or suggest the invention of amended claim 1. Claim 1 and its dependent claims should be considered patentable.

The 35 U.S.C. 103(a) rejection of claim 8 is noted. The Examiner is questioning as to the criticality of the T-shape limitation of claim 8. The Examiner's attention is directed to page 7, the first full paragraph for a discussion of the criticality of this limitation. Withdrawal of the 35 U.S.C. 103(a) rejection of claim 8 in view of this discussion is believed appropriate and therefore courteously solicited. Claim 8, now rewritten in independent form, and its dependent claims should be considered patentable. ✓

The 35 U.S.C. 103(a) rejection of claim 10 is traversed because the Examiner's suggestion or motivation to combine the references is inadequate. At least, it is unclear where the so-called suggestion or motivation to combine, as manifested in the last two lines of the fourth paragraph on page 5 of the Office Action, might be found, i.e., in the references themselves or in the knowledge generally available in the art. Applicants respectfully request that exact citation of page/column/line numbers of reference or references that supply the Examiner's suggestion or motivation to combine be provided. It should also be noted that U.S. Patent No. 6,254,965 to *McGuire* does not supply the Examiner's suggestion or motivation to combine. See column 16, lines 22-30 of *McGuire* and U.S. Patent No. 5,871,607 mentioned in this passage of *McGuire*. Claim 10, now rewritten in independent form, and its dependent claims should be considered patentable. ✓

New independent claim 29 is clearly patentable over the applied art of record, especially *Barnholtz* and *Rudy*. The patents fail to disclose, teach or suggest the limitation of claim 29 that the **thermoplastic layer has a sufficient strength to maintain the repeating pattern** when no external force is acting on said layer. On the one hand, *Barnholtz* fails to disclose and is not modifiable to have tissue paper made of thermoplastic. On the other hand, the *Rudy* plastic membranes 11-12, best seen in Figs. 2-5, do not have a sufficient strength to maintain the inflated shape. Without the trapped air, which acts as an external force to maintain the inflated shape of membranes 11-12, the spherical shapes of *Rudy* will collapse. New independent claim 29 is thus clearly patentable over the applied references. ✓

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Claims 4-7, 9, 12-28 and 30-37 depend from one of claims 1, 8, 10, and 29, and are considered patentable at least for the reasons advanced with respect to their respective independent claims. Claims 4-7, 9, 12-28 and 30-37 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art. ✓

For example, as to claims 13-15 and 17, the art fails to disclose, teach or suggest that the foam is filled in the presently claimed manner. Note that *McGuire* and *Hamilton* teach only partial filing of the pockets. See Abstract and Figures of *Hamilton*. ✓

As to claim 16, the art fails to disclose, teach or suggest the claimed printed indicia. ✓

As to claims 18-23 and 35, the art fails to disclose, teach or suggest the claimed material and compression strength. Note that *Rudy* teach a much lower range of compression strength (about 15 lb/in<sup>2</sup>) as shown in Fig. 11, and described in column 6, line 3. The packaging sheet of the present invention as claimed in claims 19-20, 22-23 and 35 can stand a much greater pressure, as discussed in pages 1, 9 and 10 of the specification. (Note 20 tonnes/0.5m<sup>2</sup> is about 57 lb/in<sup>2</sup>) ✓

As to claims 24 and 36, the art fails to disclose, teach or suggest the claimed thickness. ✓

As to claims 25-26 and 37, the art fails to disclose, teach or suggest the claimed elasticity. Note that the *Rudy* sheet after being completely flattened (i.e., deflated) will not be capable of regaining a significant portion of the initial thickness. ✓

As to claims 27-28, especially claim 28, the art fails to disclose, teach or suggest the claimed combination of T shaped protuberances and connecting webs. An advantage of this arrangement has been mentioned in the specification, i.e., page 7, lines 14-16. ✓

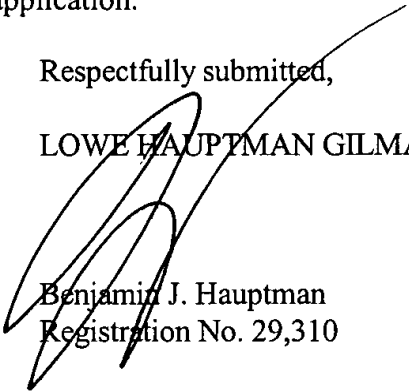
Each of the Examiner's rejections has been traversed. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

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The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

Respectfully submitted,

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**MARKED-UP VERSION SHOWING CHANGES MADE**

**IN THE CLAIMS:**

Please cancel claims 2-3, and 11 without prejudice or disclaimer.

Please amend the remaining claims as follows:

1. (Amended) A protective packaging sheet, consisting of a single material layer [comprising: front and rear surfaces, at least one of the surfaces] having a repeating pattern; [therein ,]

the repeating pattern [consisting of] comprising shaped protuberances juxtaposed with each other [adjacent shaped protuberances] to provide a gap around each of said shaped protuberances, the shaped protuberances [extending from the at least one of the surfaces and] being positioned in such a way that [all] every straight line[s] projected onto said [surface of the] sheet cuts through at least one of the shaped protuberances [in addition to] and at least one of the gaps.

4. (Amended) A protective packaging sheet as claimed in claim 1 [or claim 2], wherein [the contact surface area of the front surface is substantially equal to the contact surface area of the rear surface] said sheet has substantially equal contact areas at outermost levels on opposite sides thereof.

5. (Amended) A protective packaging sheet as claimed in claim 1 [or claim 2], wherein the repeating pattern further comprises [the packaging sheet has three levels, the front surface, the rear surface and a middle level between the front and rear surfaces, the middle level comprising a surface of] connecting webs connecting adjacent said shaped protuberances, said connecting webs being located at a middle level between uppermost and lowermost levels of said sheet.

6. (Amended) A protective packaging sheet as claimed in claim 5, wherein some of the connecting webs extend in a first direction [lateral to the shaped protuberances] and others extend in a second direction [substantially] perpendicular to the [lateral] first direction.

7. (Amended) A protective packaging sheet as claimed in claim 1 [or claim 2], wherein the shaped protuberances are [substantially] tessellatable.

8. (Amended) A protective packaging sheet, comprising front and rear surfaces, at least one of the surfaces having a repeating pattern therein;

the repeating pattern comprising shaped protuberances juxtaposed with each other to provide a gap around each of said shaped protuberances, the shaped protuberances being positioned in such a way that every straight line projected onto said sheet cuts through at least one of the shaped protuberances and at least one of the gaps;

[A protective packaging sheet as claimed in claim 1 or claim 2,] wherein the shaped protuberances are "T" shaped in plan.

9. (Amended) A protective packaging sheet as claimed in claim 1 [or claim 2], wherein [the packaging sheet is formed from a flat sheet of] said material is thermoplastics, and a [material wherein the] distance between [the front and rear surfaces of the packaging sheet] uppermost and lowermost levels of said sheet is less than or equal to about 5 times [the] a thickness of [the thermoplastics sheet from which it is formed] said material layer.

10. (Amended) A protective packaging sheet, comprising front and rear surfaces, at least one of the surfaces having a repeating pattern therein;

the repeating pattern comprising shaped protuberances juxtaposed with each other to provide a gap around each of said shaped protuberances, the shaped protuberances being positioned

in such a way that every straight line projected onto said sheet cuts through at least one of the shaped protuberances and at least one of the gaps;

[A protective packaging sheet as claimed in claim 1 or claim 2,] wherein the gaps between the shaped protuberances are filled with insulating foam.

12. (Amended) A protective packaging sheet as claimed in claim 1 [or claim 2], wherein each of the shaped protuberances comprises a top surface [protruding from the packaging sheet] atop side walls which are rounded, [bevelled] ~~beveled~~ or sloped relative to a direction perpendicular to [the] a plane of the packaging sheet.